



UNITED STATES PATENT AND TRADEMARK OFFICE

lh

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,914	01/30/2004	Shinya Kato	118452	5683

25944 7590 12/15/2005

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

HIRUY, ELIAS

ART UNIT	PAPER NUMBER
----------	--------------

2837

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental

Notice of Allowability

Application No.

10/766,914

Examiner

Elias B. Hiruy

Applicant(s)

KATO ET AL.

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/04/2005.
2. ☒ The allowed claim(s) is/are 1-9, 11 and 14-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2837

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and argument filed on 08/04/05 are received and entered into record.
2. The objection of the drawings is withdrawn per the remark of the applicant.
3. The claim rejection regarding of claim 1, 3, 4, and 5 under 35 U.S.C. §102 (b) is withdrawn as applicant amendment has overcome the rejection set-forth in the earlier office action.
4. The claim rejections of claims 2, 6, and 7 are withdrawn as the claims depend directly or indirectly on the independent claim 1 and since claim 1 is amended to overcome the claim rejection set-forth in the earlier office action.
5. Claim rejections of claims 10, 12, and 13 are withdrawn as the claims are cancelled by the amendment.

Allowable Subject Matter

6. Claims are 1-9, 11, and 14-22 allowed.
7. The following is a statement of reasons for the indication of allowable subject matter:
 - Yamane (US 5,748,206) shows a printer that teaches about a method of controlling the speed of the carriage. The method involves measuring the speed of the carriage in the first cycle and adjusting the PWM in the next cycle.
 - Igarashi (US 2003/0043228) shows a carriage motor control in a printer. The disclosure teaches how the speed differential could be calculated and

is supplied to different control parts to efficiently control the carriage motor.

- Regarding claim 1, however, none of the prior arts alone or in combination showed or taught the specific method/system that are found in independent claim 1. The primary reason for allowance is the constant speed control method with the following steps:

*the control device controls operation of the carriage using a first set of the plurality of sets of parameters and detects a **first behavior of the carriage in a constant speed area**,*

*after controlling the operation of the carriage using the first set of the plurality of sets of parameters, the control device controls operation of the carriage using a second set of the plurality of sets of parameters and **detects a second behavior of the carriage in the constant speed area**, and*

after controlling the operation of the carriage using at least the first set and the second set of the plurality of sets and the second set of the plurality of sets of parameters, the control device selects one of the plurality of sets of parameters based on the detected first behavior and the detected second behavior.

Regarding claim 15 and 20, the following steps are the reason for allowance of the claims:

*Executing a plurality of driving operations of the carriage using different ones of the plurality of sets of parameters for each of the plurality of driving operations; detecting a plurality of behaviors of the carriage **in a constant speed area during each of the plurality of driving operations;** selecting one of the plurality of sets of parameters based on the plurality of detected behaviors corresponding to **at least two of the plurality of driving operations;** and controlling the motor for driving the carriage based on the selected one of the plurality of sets of parameters.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Remarks

1. Nineteen claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias B. Hiruy whose telephone number is 571-272-6105. The examiner can normally be reached on 7:00AM - 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is

Art Unit: 2837

703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBB) at 866-217-9197 (toll-free).

EH

10/17/05